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EXAMINER

PHAM, HUNG Q

ART UNIT	PAPER NUMBER
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2162

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/660,296	KEENE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	HUNG Q PHAM	2162	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 02 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 13-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*h*

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-7 and 13-16 have been considered but are moot in view of the new ground(s) of rejection.

### ***Drawings***

As set forth in the previous action, the drawing of FIG. 8 is objected to because the top margin of FIG. 8 does not have a top margin of at least 2.5 cm. (1 inch).

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claim 13 is objected to because of the following informalities: ...*define the scope of access of the object for the user; including identifying separate groups of...* Appropriate correction is required.

Claim 15 is objected to because of the following informalities: *receiving a object request...* Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claim 1, 7, 13-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.**

As in claim 1, the claimed *a cache memory for storing user access criteria* was not described in the specification (as in FIG. 4, only a cache memory 402 is specified, and this cache is for storing user ID's as claimed).

As in claims 7 and 13-15, the claimed *verifying a user's user privilege access criteria including ... verifying first in cache memory and if not in cache then in main memory the user's user identification, and upon verification of user ID and user privileges, searching first in caches and if not found in memory then in main memory...* was not described in the specification.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 1-7 and 13-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Regarding claim 1,

in the limitation, *means for establishing access criteria wherein each group of data has an associated user privilege for identifying separate groups of information to which user may have access to the groups of data and setting a user's ID including defining which users are allowed to access the object and associated information and associated user privileges, the*

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clause *and associated user privileges* references to some other items in the claim. It is unclear what item is being referenced;

in the limitation, *access application code, stored in the memory and executable by the CPU, the application code being responsive to the user ID and user access criteria associated with the groups of data contained within an object and to predetermined privileges for allowing controlled access to individual groups of data contained within the object by an individual user according to the user's access privileges*, the clause *by an individual user according to the user's access privileges* references to some other items in the claim. It is unclear what item is being referenced.

Claims 2-5 recite *the requested object*. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites *the product chain*. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites *the object request*, and *the data request* in the step of verifying. There is insufficient antecedent basis for these limitations in the claim.

Claim 15 recites *the data request* in the step of verifying. There is insufficient antecedent basis for these limitations in the claim.

As in claims 7 and 13-15, in the limitation, *searching first in caches and if not found in memory then in main memory...*, the clause *if not found in memory* references to some other items in the claim. It is unclear what item is being referenced.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claim 1, 2, 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukherjee et al. [USP 5,317,729] in view of Sadovsky [USP 5,689,638].**

Regarding claim 1, Mukherjee teaches a system and method for providing the transfer and control access to a version of an object and associated information. The Mukherjee system and method comprises:

*means for establishing an object* (BILL OF MATERIAL or BOM is an object created by a design engineer, Col. 4, Lines 26-31 and 48-51), *the object comprising distinguishable groups of data* (BOM comprises a plurality of rows with different data as distinguishable groups of data, FIG. 4), *each group of data having associated access criteria for access to the groups of data* (each row has associated SECURITY LEVEL as access criteria for access to group of data, Col. 5, Line 55-Col. 6, Line 22);

*a database for storing the object and associated information* (FIG. 1, RELATIONAL DATABASE 40 storing BOM and associated information, e.g., ENGINEERING CHANGE NOTICES...);

*means for establishing access criteria* (SECURITY LEVEL as access criteria is established by DATA ACCESS AUTHORIZATION TABLE as in FIG. 3), *wherein each group of data has an associated user privilege for identifying separate groups of information to which user may have access to the groups of data* (VIEW ID as user privilege, e.g., ENGL associated with group of data with INSERT SEQUENCE 6001, LOC1 associated with group of data with INSERT SEQUENCE 4001 as in BOM of FIG. 9, Col. 6, Lines 32-36 ), *and setting a user's ID including defining which users are allowed to access the object and associated information* (DESIGN ENGINEERING, MANUFACTURING ENGINEERING... as user IDs to control access to different BOM version, and user ID in ENGINEERING CHANGE NOTICES,



ITEM ENGINEERING DATA as associated information are defined) and *setting associated user privileges* (FIG. 4);

*a central processing unit (CPU) for controlling the access to the database in accordance with the access criteria; a memory for storing software code for controlling the operation of the CPU* (FIG. 1, PROCESSOR 30, and VERSION CONTROL COMPUTER PROGRAM 20 implies a memory for embedding the program, Col. 4, Lines 12-16 and 64-67);

*access application code, stored in the memory and executable by the CPU* (FIG. 11), *the application code being responsive to the user ID and user access criteria associated with the groups of data contained within an object and to predetermined privileges for allowing controlled access to individual groups of data contained within the object by an individual user according to the user's access privileges* (FIG. 11, Col. 9, Lines 22-29);

*thereby transmitting a redacted object to a user wherein transmitting a redacted object includes sending an electronic object to the user that contains the groups of information to which the user has access to and that excludes groups of information to which the user does not have access* (by using the application program as in FIG. 11, PRODUCTION PLANNING associated with SECURITY LEVEL 3, for example, can retrieve a BOM of FIG. 10 with rows corresponding only to INSERT SEQUENCE 4001, the BOM of only INSERT SEQUENCE 4001 is a redacted BOM or object, because the original BOM includes SEQUENCE 6001 and 4001, wherein rows of SEQUENCE 6001 as information group to which the user does not have access are excluded, FIG. 11, Col. 6, Lines 32-41).

The missing in Mukherjee teaching is *a cache memory for storing user ID's*; and *a cache memory for storing user access criteria*.

However, cache is a conventional memory and frequently used data are stored in cache, each time the processor references an address in memory, cache is checked first for quick access. Sadovsky discloses the technique of storing authentication data in cache for quick access (Sadovsky, Abstract).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to store user ID and access criteria as disclosed at Mukherjee FIG. 3 in cache, and by storing authentication data in cache, the verifying process will be faster.

Regarding claim 2, Mukherjee and Sadovsky, in combination, teach all of the claimed subject matter as discussed above with respect to claim 1, Mukherjee further discloses *access includes the ability of a user to read the contents of the requested object* (Col. 8, Line 61-Col. 9, Line 21).

Regarding claim 6, Mukherjee and Sadovsky, in combination, teach all of the claimed subject matter as discussed above with respect to claim 1, Mukherjee further discloses the claimed *the access is determined by a business relationship to produce products and defined by the host according to the need of information in the product chain* (FIG. 3 and 4).

Regarding claim 16, Mukherjee and Sadovsky, in combination, teach all of the claimed subject matter as discussed above with respect to claim 1, Mukherjee further discloses *means for sending an electronic object to the user that contains the groups of information*

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*to which the user has access to and that excludes groups of information to which the user does not have access* (by using the application program as in FIG. 11, PRODUCTION PLANNING associated with SECURITY LEVEL 3, for example, can retrieve a BOM of FIG. 10 with rows corresponding only to INSERT SEQUENCE 4001, the BOM of only INSERT SEQUENCE 4001 is a redacted BOM or object, because the original BOM includes SEQUENCE 6001 and 4001, wherein rows of SEQUENCE 6001 as information group to which the user does not have access are excluded, FIG. 11, Col. 6, Lines 32-41).

**Claim 7 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukherjee et al. [USP 5,317,729] in view of Kimura et al. [USP 5,864,853].**

Regarding claim 7, Mukherjee teaches a system and method for providing the transfer and control access to a version of an object and associated information. The Mukherjee system and method comprises:

*establishing an object* (BILL OF MATERIAL or BOM is an object created by a design engineer, Col. 4, Lines 26-31 and 48-51) *including loading information into the object into separate groups having separate privilege access criteria* (each row in BOM as a group has loaded information and associated SECURITY LEVEL as privilege access criteria, Col. 5, Line 55-Col. 6, Line 22);

*storing the object* (FIG. 1, RELATIONAL DATABASE 40 storing BOM and associated information, e.g., ENGINEERING CHANGE NOTICES...), *the object*

*comprising distinguishable groups of data* (BOM comprises a plurality of rows with different data as distinguishable groups of data, FIG. 4);

*establishing access criteria* (SECURITY LEVEL as access criteria is established by DATA ACCESS AUTHORIZATION TABLE as in FIG. 3), *wherein each group of data having an associated user privilege including identifying separate groups of information to which the user may have access criteria for access to the groups of data* (VIEW ID as user privilege, e.g., ENGL associated with group of data with INSERT SEQUENCE 6001, LOC1 associated with group of data with INSERT SEQUENCE 4001 as in BOM of FIG. 9, Col. 6, Lines 32-36); *setting a use's ID including defining which users are allowed to access the object and associated information* (DESIGN ENGINEERING, MANUFACTURING ENGINEERING... as user IDs to control access to different BOM version, and user ID in ENGINEERING CHANGE NOTICES, ITEM ENGINEERING DATA as associated information are defined) and *setting associated user privileges* (FIG. 4);

*controlling the access to the database using a central processing unit (CPU) according to the access criteria; storing software code for controlling the operation of the CPU in memory* (FIG. 1, PROCESSOR 30, and VERSION CONTROL COMPUTER PROGRAM 20 implies a memory for embedding the program, Col. 4, Lines 12-16 and 64-67); and

*identifying the groups of data to which the user has access and privileges with respect thereto thereby allowing controlled access to individual groups of data contained within the object by an individual user according to the user's privileges in response to the access criteria associated with the groups of data contained within an object and to predetermined privileges* (by entering ITEM NUMBER and BOM name as in FIG. 11, in response to SECURITY LEVEL and view ID as *access criteria* and *predetermined privileges* associated with rows of data within BOM,

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groups of data to which design or manufacturing engineers has access and privileges are identified by SECURITY LEVEL and VIEW ID in each BOM row, e.g., FIG. 10, and that design or manufacturing is allowed to view the BOM rows according to view ID, Col. 5, Lines 64-68, Col. 9, Lines 21-39)

*retrieving the data requested according to the user's access criteria and transmitting a redacted object to the user, wherein transmitting a redacted object includes sending an electronic object to the use that contains the groups of information to which the user has access to and that excludes groups of information to which the user does not have access* (by using the application program as in FIG. 11, PRODUCTION PLANNING associated with SECURITY LEVEL 3, for example, can retrieve a BOM of FIG. 10 with rows corresponding only to INSERT SEQUENCE 4001, the BOM of only INSERT SEQUENCE 4001 is a redacted BOM or object, because the original BOM includes SEQUENCE 6001 and 4001, wherein rows of SEQUENCE 6001 as information group to which the user does not have access are excluded, FIG. 11, Col. 6, Lines 32-41).

The missing in Mukherjee teaching is the steps of *verifying a user's user privilege access criteria including extracting the user's user identification from the object request, verifying first in cache memory and if not in cache then in main memory the user's user identification*, then process the step of identifying the groups of data as discussed above *upon verification of user ID and user privileges*, and *searching first in cache and if not found in memory then in main memory* for retrieving the data requested.

Kimura teaches the technique of *verifying a user's user privilege access criteria including extracting the user's user identification from the object request*, then identifying data for reading or writing *upon verification of user ID and user privileges* (Kimura, Col. 13, Lines 18-28).

Cache is a conventional memory and frequently used data are stored in cache, each time the processor references an address in memory, cache is checked first for quick access. Therefore, *verifying first in cache memory and if not in cache then in main memory the user's user identification*, and *searching first in cache and if not found in memory then in main memory* for the data requested is a feature of cache.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Mukherjee method by including the step of verifying user privilege access as taught by Kimura in order to have a secured database.

Regarding claim 13, Mukherjee teaches a program for use with a computer system, a central unit and means coupled to the central processing unit for storing a database to automatically manage objects for viewing and marking an object having varying formats without the use of any originating application of a file to view the object (FIG. 1 and 11). The Mukherjee program comprises:

*computer readable code means for establishing an object in a storage location* (BILL OF MATERIAL or BOM is an object created by a design engineer, Col. 4, Lines 26-31 and 48-51, FIG. 1, RELATIONAL DATABASE 40 storing BOM) *including loading information into the object into separate groups having separate privilege access criteria* (each row in BOM as a group has loaded information and associated SECURITY LEVEL as privilege access criteria, Col. 5, Line 55-Col. 6, Line 22); *storing the object* (FIG. 1, RELATIONAL DATABASE 40 storing BOM and associated information, e.g., ENGINEERING

CHANGE NOTICES...), *the object comprising distinguishable groups of data* (BOM comprises a plurality of rows with different data as distinguishable groups of data, FIG. 4);

*computer readable code means for establishing privilege access criteria that define the scope of access of the object for the user* (SECURITY LEVEL as access criteria is established by DATA ACCESS AUTHORIZATION TABLE as in FIG. 3), *whereby each group of data has an associated user privilege that define the scope of access of the object for the user including identifying separate groups of information to which the user may have access criteria for access to the groups of data* (VIEW ID as user privilege, e.g., ENGL associated with group of data with INSERT SEQUENCE 6001, LOC1 associated with group of data with INSERT SEQUENCE 4001 as in BOM of FIG. 9, Col. 6, Lines 32-36 );

*setting a user's ID including defining which user are allowed to access to object and associated information* (DESIGN ENGINEERING, MANUFACTURING ENGINEERING... as user IDs to control access to different BOM version, and user ID in ENGINEERING CHANGE NOTICES, ITEM ENGINEERING DATA as associated information are defined) and *setting user privileges* (FIG. 4);

*computer readable code means for receiving an object request by a user* (FIG. 11);

*identifying the groups of data to which the user has access and privileges with respect thereto thereby allowing controlled access to individual groups of data contained within the object by an individual user according to the user's privileges in response to the access criteria associated with the groups of data contained within an object and to predetermined privileges* (by entering ITEM NUMBER and BOM name as in FIG. 11, in response to SECURITY LEVEL and view ID as *access criteria* and *predetermined privileges* associated with rows of data within BOM, groups of data to which design or manufacturing engineers has access and privileges

are identified by SECURITY LEVEL and VIEW ID in each BOM row, e.g., FIG. 10, and that design or manufacturing is allowed to view the BOM rows according to view ID, Col. 5, Lines 64-68, Col. 9, Lines 21-39);

*retrieving the data requested according to the user's access criteria and transmitting a redacted object to the user, wherein transmitting a redacted object includes sending an electronic object to the use that contains the groups of information to which the user has access to and that excludes groups of information to which the user does not have access* (by using the application program as in FIG. 11, PRODUCTION PLANNING associated with SECURITY LEVEL 3, for example, can retrieve a BOM of FIG. 10 with rows corresponding only to INSERT SEQUENCE 4001, the BOM of only INSERT SEQUENCE 4001 is a redacted BOM or object, because the original BOM includes SEQUENCE 6001 and 4001, wherein rows of SEQUENCE 6001 as information group to which the user does not have access are excluded, FIG. 11, Col. 6, Lines 32-41).

The missing in Mukherjee teaching is the steps of *identifying a user to have access to the object; verifying a user's user privilege access criteria including extracting the user's user identification from the object request, verifying first in cache memory and if not in cache then in main memory the user's user identification*, then process the step of identifying the groups of data as discussed above *upon verification of user ID and user privileges*, and *searching first in cache and if not found in memory then in main memory* for retrieving the data requested.

Kimura teaches the technique of *identifying a user to have access to the object* (Kimura, FIG. 10, S61-S62); *verifying a user's user privilege access criteria including extracting the user's user identification from the object request*, then identifying data for reading or writing *upon verification of user ID and user privileges* (Kimura, Col. 13, Lines 18-28).



Cache is a conventional memory and frequently used data are stored in cache, each time the processor references an address in memory, cache is checked first for quick access. Therefore, *verifying first in cache memory and if not in cache then in main memory the user's user identification*, and *searching first in cache and if not found in memory then in main memory* for the data requested is a feature of cache.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Mukherjee method by including the step of verifying user privilege access as taught by Kimura in order to have a secured database.

Regarding claim 14, Mukherjee teaches a system and method for providing the transfer and control access to a version of an object and associated information. The Mukherjee system and method comprises:

*a computer program storage device readable by a digital processing apparatus; a program stored on the program storage device and including instructions executable by the digital processing apparatus for controlling the apparatus to perform a method of managing documents for viewing and marking an object having varying formats* (Col. 4, Lines 12-25) *without the use of any originating application of a file to view the object stored in the file* (objects are stored in a relational database but data is retrieved by an application program as in FIG. 1, not using SQL statement for retrieving), comprising:

*establishing an object in a storage location* (BILL OF MATERIAL or BOM is an object created by a design engineer, Col. 4, Lines 26-31 and 48-51, FIG. 1, RELATIONAL DATABASE 40 storing BOM) *including loading information into the object into separate groups having separate privilege access criteria* (each row in BOM as a group has loaded information

and associated SECURITY LEVEL as privilege access criteria, Col. 5, Line 55-Col. 6, Line 22); *storing the object* (FIG. 1, RELATIONAL DATABASE 40 storing BOM and associated information, e.g., ENGINEERING CHANGE NOTICES...), *the object comprising distinguishable groups of data* (BOM comprises a plurality of rows with different data as distinguishable groups of data, FIG. 4);

*establishing privilege access criteria that define the scope of access of the object for the user* (SECURITY LEVEL as access criteria is established by DATA ACCESS AUTHORIZATION TABLE as in FIG. 3);

*receiving an object request by a user* (FIG. 11);

*identifying the groups of data to which the user has access and privileges with respect thereto thereby allowing controlled access to individual groups of data contained within the object by an individual user according to the user's privileges in response to the access criteria associated with the groups of data contained within an object and to predetermined privileges* (by entering ITEM NUMBER and BOM name as in FIG. 11, in response to SECURITY LEVEL and view ID as *access criteria* and *predetermined privileges* associated with rows of data within BOM, groups of data to which design or manufacturing engineers has access and privileges are identified by SECURITY LEVEL and VIEW ID in each BOM row, e.g., FIG. 10, and that design or manufacturing is allowed to view the BOM rows according to view ID, Col. 5, Lines 64-68, Col. 9, Lines 21-39);

*retrieving the data requested according to the user's access criteria and transmitting a redacted object to the user, wherein transmitting a redacted object includes sending an electronic object to the user that contains the groups of information to which the user has access to and that excludes groups of information to which the user does not have access* (by using the application program as in FIG.

11, PRODUCTION PLANNING associated with SECURITY LEVEL 3, for example, can retrieve a BOM of FIG. 10 with rows corresponding only to INSERT SEQUENCE 4001, the BOM of only INSERT SEQUENCE 4001 is a redacted BOM or object, because the original BOM includes SEQUENCE 6001 and 4001, wherein rows of SEQUENCE 6001 as information group to which the user does not have access are excluded, FIG. 11, Col. 6, Lines 32-41).

The missing in Mukherjee teaching is the steps of *identifying a user to have access to the object; verifying a user's user privilege access criteria including extracting the user's user identification from the object request, verifying first in cache memory and if not in cache then in main memory the user's user identification*, then process the step of identifying the groups of data as discussed above *upon verification of user ID and user privileges, and searching first in cache and if not found in memory then in main memory* for retrieving the data requested.

Kimura teaches the technique of *identifying a user to have access to the object* (Kimura, FIG. 10, S61-S62); *verifying a user's user privilege access criteria including extracting the user's user identification from the object request*, then identifying data for reading or writing *upon verification of user ID and user privileges* (Kimura, Col. 13, Lines 18-28).

Cache is a conventional memory and frequently used data are stored in cache, each time the processor references an address in memory, cache is checked first for quick access. Therefore, *verifying first in cache memory and if not in cache then in main memory the user's user identification*, and *searching first in cache and if not found in memory then in main memory* for the data requested is a feature of cache.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Mukherjee method by including the step of verifying user privilege access as taught by Kimura in order to have a secured database.

Regarding claim 15, Mukherjee teaches a method of securely transferring data between a source and an access destination in a computer server having a database for storing data pertaining to product information (Abstract and FIG. 1). The Mukherjee method comprising:

*establishing an object in a storage location* (BILL OF MATERIAL or BOM is an object created by a design engineer, Col. 4, Lines 26-31 and 48-51, FIG. 1, RELATIONAL DATABASE 40 storing BOM) *including loading information into the object into separate groups having separate privilege access criteria* (each row in BOM as a group has loaded information and associated SECURITY LEVEL as privilege access criteria, Col. 5, Line 55-Col. 6, Line 22); *storing the object* (FIG. 1, RELATIONAL DATABASE 40 storing BOM and associated information, e.g., ENGINEERING CHANGE NOTICES...), *the object comprising distinguishable groups of data* (BOM comprises a plurality of rows with different data as distinguishable groups of data, FIG. 4);

*establishing access criteria* (SECURITY LEVEL as access criteria is established by DATA ACCESS AUTHORIZATION TABLE as in FIG. 3), *wherein each group of data having an associated user privilege including identifying separate groups of information to which the user may have access criteria for access to the groups of data* (VIEW ID as user privilege, e.g., ENGL associated with group of data with INSERT SEQUENCE 6001, LOC1 associated with

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group of data with INSERT SEQUENCE 4001 as in BOM of FIG. 9, Col. 6, Lines 32-36

*); setting a use's ID including defining which users are allowed to access the object and associated information* (DESIGN ENGINEERING, MANUFACTURING ENGINEERING... as user IDs to control access to different BOM version, and user ID in ENGINEERING CHANGE NOTICES, ITEM ENGINEERING DATA as associated information are defined) and *setting associated user privileges* (FIG. 4);

*receiving an object request by a user* (FIG. 11);

*identifying the groups of data to which the user has access and privileges with respect thereto thereby allowing controlled access to individual groups of data contained within the object by an individual user according to the user's privileges in response to the access criteria associated with the groups of data contained within an object and to predetermined privileges* (by entering ITEM NUMBER and BOM name as in FIG. 11, in response to SECURITY LEVEL and view ID as *access criteria* and *predetermined privileges* associated with rows of data within BOM, groups of data to which design or manufacturing engineers has access and privileges are identified by SECURITY LEVEL and VIEW ID in each BOM row, e.g., FIG. 10, and that design or manufacturing is allowed to view the BOM rows according to view ID, Col. 5, Lines 64-68, Col. 9, Lines 21-39);

*retrieving the data requested according to the user's access criteria and transmitting a redacted object to the user, wherein transmitting a redacted object includes sending an electronic object to the use that contains the groups of information to which the user has access to and that excludes groups of information to which the user does not have access* (by using the application program as in FIG. 11, PRODUCTION PLANNING associated with SECURITY LEVEL 3, for example, can retrieve a BOM of FIG. 10 with rows corresponding only to INSERT SEQUENCE 4001,

the BOM of only INSERT SEQUENCE 4001 is a redacted BOM or object, because the original BOM includes SEQUENCE 6001 and 4001, wherein rows of SEQUENCE 6001 as information group to which the user does not have access are excluded, FIG. 11, Col. 6, Lines 32-41).

The missing in Mukherjee teaching is the steps of *identifying a user to have access to the object; verifying a user's user privilege access criteria including extracting the user's user identification from the object request, verifying first in cache memory and if not in cache then in main memory the user's user identification*, then process the step of identifying the groups of data as discussed above *upon verification of user ID and user privileges*, and *searching first in cache and if not found in memory then in main memory* for retrieving the data requested.

Kimura teaches the technique of *identifying a user to have access to the object* (Kimura, FIG. 10, S61-S62); *verifying a user's user privilege access criteria including extracting the user's user identification from the object request*, then identifying data for reading or writing *upon verification of user ID and user privileges* (Kimura, Col. 13, Lines 18-28).

Cache is a conventional memory and frequently used data are stored in cache, each time the processor references an address in memory, cache is checked first for quick access. Therefore, *verifying first in cache memory and if not in cache then in main memory the user's user identification*, and *searching first in cache and if not found in memory then in main memory* for the data requested is a feature of cache.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Mukherjee method by including the step of verifying user privilege access as taught by Kimura in order to have a secured database.

**Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukherjee et al. [USP 5,317,729] and Sadovsky [USP 5,689,638], as applied to claim 2, and further in view of Koko et al. [USP 5,434,791].**

Regarding claim 3, Mukherjee and Sadovsky, in combination, teach all of the claimed subject matter as discussed above with respect to claim 2, but does not explicitly teach *the access includes the ability to modify the contents of the requested object*. Koko teaches a user interface for displaying a BOM and *the ability to modify the contents of the requested object* (Koko, Col. 28, Lines 5-10). It would have been obvious for one of ordinary skill in the art at the time the invention was made to include the ability to modify the contents of a retrieved BOM in order to correct information of a Bill of Material.

Regarding claim 4, Mukherjee, Sadovsky and Koko, in combination, teach all of the claimed subject matter as discussed above with respect to claim 3, Koko further discloses *the ability to modify includes the ability to delete information contained in the requested object* (Koko, Col. 28, Lines 5-10).

Regarding claim 5, Mukherjee, Sadovsky and Koko, in combination, teach all of the claimed subject matter as discussed above with respect to claim 3, Koko further discloses *the ability to modify includes the ability to add data to the requested object* (Koko, Col. 28, Lines 5-10).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

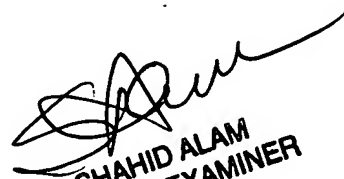
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner Hung Pham  
March 4, 2005



SHAHID ALAM  
PRIMARY EXAMINER